Serial No. 09/690,393

-2-

Art Unit: 2157

## **CLAIMS**

1. (currently amended) A method of distributing routing information through a plurality of network devices, the plurality of network devices being members of a single domain, each of the network devices operating in accord with having a defined given policy relating to forwarding of routing information, the method comprising:

receiving, from outside the domain, an information message at one of the <u>a</u> network devices device in the domain, the information message having routing information;

modifying the routing information for forwarding to a peer network device internal to the domain, by adding a local preference attribute to the routing information, the local preference attribute selected by the network device applying the given policy of the network device that received the information message to the routing information in the information message to produce policy filtered routing information; and

flooding the policy filtered routing information to each of the plurality of network devices.

- (original) The method as defined by claim 1 wherein the plurality of network devices are in a ring connectivity.
- 3. (currently amended) The method as defined by claim 1 wherein the plurality of network devices comprises at least three network devices, the at least three network devices including a given defined network device that is connected with no more than one other of the plurality of network devices.
- 4. (original) The method as defined by claim 1 wherein the act of flooding comprises adding a link state advertisement header to the policy filtered routing information.
- 5. (original) The method as defined by claim 1 wherein the policy filtered routing information comprises the received routing information in the information message.

Art Unit: 2157

T-687

- (original) The method as defined by claim 1 further comprising storing the routing information in local data storage.
- 7. (currently amended) The method as defined by claim 1 wherein the givendefined policy is set by an administrator.
- 8. (previously-currently amended) An apparatus for distributing routing information to a plurality of network devices, the plurality of network devices being members of a first domain, each of the network devices operating in accord with a defined given-policy relating to forwarding of routing information, the apparatus comprising:

an input coupled with for coupling to a network device in a external to the second domain for, the input receiving an information message from the network device in the second domain, the information message having routing information;

a policy module coupled with the input, the policy module for modifying the routing information for forwarding to a peer device internal to the domain by applying adding a local preference attribute to the routing information, the local preference attribute selected by the network device the given policy to the routing information on the information in the information message to produce policy filtered routing information; and

an output coupled with the policy module, the output flooding the policy filtered routing information to each of the plurality of network devices.

- 9. (original) The apparatus as defined by claim 8 wherein the plurality of network devices are in a ring connectivity.
- 10. (currently amended) The apparatus as defined by claim & wherein the plurality of network devices comprises at least three network devices, the at least three network devices including a givendefined network device that is connected with no more than one other of the plurality of network devices.

12:24pm

Art Unit: 2157

- 11. (original) The apparatus as defined by claim 8 further comprising a link state module for adding a link state advertisement header to the policy filtered routing information.
- 12. (original) The apparatus as defined by claim 8 wherein the policy based routing information comprises the received routing information in the information message.
- 13. (original) The apparatus as defined by claim 8 further comprising memory for storing the routing information.
- 14. (currently amended) The apparatus as defined by claim 8 wherein the givendefined policy is set by an administrator.
- 15.(currently amended) A computer program product for use in a network device in a first domain of network devices, the computer program product comprising a computer usable medium having computer readable program code thereon, the computer readable product code comprising:

program code for receiving an information message having routing information from a network device in a second- an external domain;

program code for modifying the routing information for forwarding to a peer device internal to the domain by applying policy adding a local preference attribute to the routing information, the local preference attribute selected by the network device to the routing information in the information message to produce policy filtered routing information; and

program code for flooding the policy filtered routing information to each peer network device in the first domain.

- 16. (currently amended) The computer program product as defined by claim 15 wherein the first domain of network devices are in a ring connectivity.
- 17. (currently amended) The computer program product as defined by claim 15 wherein the first domain of network devices comprises at least three network devices, the at least three network

Serial No. 09/690,393

- 5 -

Art Unit: 2157

devices including a given network device devices that is connected with no more than one other of the plurality of network devices.

- 18. (original) The computer program product as defined by claim 15 wherein the program code for flooding comprises program code for adding a link state advertisement header to the policy filtered routing information.
- 19. (original) The computer program product as defined by claim 15 wherein the policy filtered routing information comprises the received routing information in the information message.
- 20. (original) The computer program product as defined by claim 15 further comprising program code for storing the routing information in local data storage.
- 21. (currently amended) The computer program product as defined by claim 15 wherein the defined policy is set by an administrator.
- 22. (currently amended) A network device in a first-domain operating in accord with a givendefined policy relating to routing information, the network device comprising:

an input coupled with a network device in a second domain, the input receiving an information message from the network device in the second domain, the information message having routing information;

a policy module coupled with the input, the policy module modifying the routing information for forwarding to a peer network device internal to the domain by adding a local preference attribute applying the given policy to the routing information in the information message to produce policy filtered routing information; and

an output coupled with the policy module, the output flooding the policy filtered routing information to each peer network device in the first-domain.

23. (original) The network device of claim 22 further comprising a link state module for adding a link state advertisement header to the policy filtered routing information.

Serial No. 09/690,393

-6-

Art Unit: 2157

24.(canceled)

25. (canceled)

26. (canceled)